

R E P O R T
ON THE PROPOSED
CASSIA FOREST RESERVE
IDAHO

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REPORT ON THE PROPOSED CASSIA FOREST RESERVE, IDAHO

By E. M. Griffith

Location

The proposed Cassia Forest Reserve, petitioned for by residents of the vicinity August 13, 1903, is situated in Cassia County, Idaho, and comprises the following described lands:

<u>Township South</u>	<u>Of Range East Boise Base and Meridian</u>
East half of 13	17
All of 13	18
All of 13	19
East half of 14	17
All of 14	18
West East half of 14	19
All of 15	18
West East half of 15	19
All of 16	18
All of 16	19

Area

The proposed reserve contains 8 townships or approximately 184,320 acres.

Topography

Long leading ridges, separated by fairly deep canyons, extend north and south from the low mountains in the central portion of the tract. On the north, west and south the land rises very gradually from the plains, while on the east the mountain range extends over to the headwaters of Trappers Creek.

Climate

Cassia County lies within the arid belt and has a long, very dry, hot summer, a short cool fall, and a long cold winter without much snow.

Following is the mean monthly temperature at Oakley for 1901:

<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
31	31	37	39			73	70	54	52	42	

Following is the mean monthly precipitation at Oakley for 1901:

<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
0.55	1.30	0.15	0.20	0.90	0.15	0.10	1.20	0.70	1.50	0.20	

The record for December is missing, but it is safe to figure on an annual precipitation of not over 7 inches. In 1901 killing frosts occurred as early as Sept. 8th and as late as June 13th.

The Forest

Only from 9,000 to 10,000 acres, about 5 per cent of the entire proposed reserve of 184,320 acres, contain any timber, and this is mostly small lodgepole pine on the upper slopes and aspen near the headwaters of the streams. The rest of the land is covered with sage brush with here and there a little grass which furnishes a miserable range for a large number of cattle, sheep and horses.

The heads of all the creeks rising within the proposed reserve are fairly well protected by a dense growth of aspen, most of which runs from 2 to 3 inches in diameter; too small to be of commercial value, even for fuel. A scattering growth of small lodgepole pine is found in mixture with the aspen, but most of it is being crowded out by the latter and is hardly worth consideration. Wherever the pine has been cut, aspen quickly takes its place, and covers the ground with a dense young growth.

On the headwaters of Cottonwood Creek, including its six small tributaries, there is quite a heavy growth of aspen with some scattering clumps of lodgepole pine and there are some fairly large bodies of both species near the head of Goose Creek. There is very little timber on the headwaters of Dry Creek; only here and there a scattering growth of aspen and lodgepole.

All timber large enough for fuel is merchantable, regardless of species, but probably there is not over 1,000,000

feet of saw log timber on the whole tract. Nor are there any indications that this region ever was forested, for the oldest settlers say that when they first came to the country there was only the present growth of aspen and lodgepole pine along the course of the streams. The only material change in the condition of the forest seems to be that the settlers have cut out a large part of the lodgepole pine, which is now replaced by aspen.

Industries

Stock raising is the principal industry and thousands of cattle, sheep and horses are owned by settlers in the immediate vicinity of the proposed reserve. There are some very good ranches on Goose, Rock, Dry and Shoshone Creeks, which raise a large amount of hay for winter feeding.

Rock Creek, on Rock Creek, and Oakley, on Goose Creek, are the only towns of any importance in the vicinity of the reserve. The former, which is a center for the cattle industry, has a population of 150 to 200, while Oakley, where a large number of sheep are owned, has a population of about 250.

The Twin Falls Land and Water Company is constructing a canal to divert water from Snake River 23 miles above Shoshone Falls and bring it in a westerly direction for a distance of 69 miles. The main canal will be 80 feet wide at the bottom and 120 feet wide at the top, and will carry a volume of water 10 feet in depth. A tract of 244,000 acres, situated mainly to

the east, north and west of the town of Rock Creek, will be irrigated by this canal, which must be completed, according to contract, by May 1, 1904. The canals and laterals will constitute a system requiring over 1000 miles of excavation, and the Company expects to have some 4000 settlers on the tract within two years, and eventually from 10,000 to 12,000.

Rock Creek and Oakley depend upon the proposed forest reserve for cordwood, rails and fence posts, and an inconsiderable amount of small, rough, very inferior lumber. Settlers on the tract owned by the Twin Falls Land and Water Company must haul lumber for their houses from Shoshone or Kimama, both on the Oregon Short Line Railroad, a distance of 40 to 45 miles, but will also depend upon the nearby mountains for cordwood, fence rails and posts, and some rough lumber until a railroad is built. Several preliminary surveys for a branch line to connect with the Oregon Short Line Railroad at American Falls have already been run and it is expected that the road will be completed by January, 1905.

All the flow of Goose, Rock, Dry, and Shoshone Creeks has been appropriated for irrigation and during the dry summer months only those holding prior rights have any where near the amount required for the best development of their ranches.

The Forest as a Protection Cover

The headwaters of all streams rising within the proposed reserve are fairly well protected by a heavy growth of

aspen, with some lodgepole pine in mixture and scattering small clumps of almost pure lodgepole.

Rock Creek is by far the most important, for a large number of very good ranches are dependent upon it for irrigation. In the spring, while the snows are melting, it carries from 6000 to 8000 miner's inches, but during the dry season (July, August and September) the flow falls to from 200 to 250 inches, about 33 per cent of which is supplied by warm springs on the east fork, and 25 per cent by warm springs on the west fork, of the Creek. The flow from these springs comes from a great depth and is constant throughout the year, consequently the ranchers are certain of over 50 per cent of the average flow of Rock Creek during the irrigating season, irrespective of the amount of snow or rainfall. The headwaters of Dry Creek are fairly well protected by a scattering growth of aspen and lodgepole pine, but nearly all the summer flow of this stream also comes from springs near its head, which are said to be constant throughout the year.

Since during the dry season the main supply of the most important streams in this region comes from warm springs which rise from a great depth and are constant throughout the year, and since the headwaters of all the streams are fairly well protected, chiefly by aspen most of which is not of a merchantable size even for fuel, it would seem as if their flow should remain comparatively regular throughout the year. Unfortunately, however, the spring run-off is so rapid that the ranchers utilize only a small proportion of the flood water. Nor do these streams

contain any good sites for reservoirs where it could be held in storage for the dry season.

The remaining clumps of merchantable lodgepole pine, if removed, will quickly be replaced by aspen, itself an excellent conserver of the water supply. The dense growth of sage brush which, with scattering clumps of chaparral, covers this whole section, assists materially in holding the snows and preventing rapid run-off.

Roads and Railroads

Shoshone and Kimama are the nearest railroad stations, each on the Oregon Short Line about 45 miles from Rock Creek, but, as previously stated, it is expected that a branch line will be completed to Rock Creek by January, 1905. One fairly good wagon road runs from the head of Cottonwood Creek to the town of Rock Creek, thus crossing the northern portion of the proposed reserve. Sheep and cattle trails run in every direction, but are of little use to the horsemen, who can ride almost any where over this rolling open country, for the most part covered only by sage brush and occasional patches of chaparral.

Lumbering

There is but one sawmill in the proposed reserve; a small portable one located near the head of Cottonwood Creek, where there still remains a small amount of scattering lodgepole pine large enough for lumber. This mill has been moved about

from creek to creek and has cut out most of the fairly good-sized pine. The cutting has done very little damage, for the clumps of merchantable timber were very scattered and in every case aspen has quickly taken their place.

This lumber was badly needed and will be until the branch railway is completed, as the nearest points from which it can be supplied are Shoshone and Kimama. Rough lumber from the mill on Cottonwood Creek sells for \$22.50 per M, while finished lumber, hauled from Shoshone or Kimama, is sold at Rock Creek for \$32.00 per M.

Grazing

Nearly 95 per cent of the proposed reserve is a hilly, rolling country covered with sage brush, with here and there patches of chaparral. It furnishes a miserable range to a large number of cattle, sheep and horses and has been very much overgrazed. Most of the grass has been killed and all the stock are in a wretched condition. The grazing season is from about the 15th of May to the 15th of October and the ranchers testify that during these five months some 50,000 sheep, 10,000 cattle and 1,000 horses are grazed within the proposed reserve of only eight townships. About half of these sheep come from Utah, while the remainder are owned by settlers who live at Oakley and on Goose Creek. The Sparks, Harrell Co. own about half of the cattle, the other half coming mainly from the town of Rock Creek. Settlers living on Rock and Goose Creeks own most of the horses using this range.

Fire

Small forest fires have occurred almost every year. Three, during the summer of 1903, are supposed to have been started by sheep herders burning over mountain laurel or chaparral, which they dislike because the sheep get lost in it and also lose much of their wool. Sheep herders are also said to have started fires on Shoshone Creek in order to injure the Sparks, Harrell Co., which owns timberland there and has forbidden the grazing of sheep thereon.

Most of the large lodgepole pine has been seriously injured by fire and in many sections the young growth is totally destroyed.

Sentiment in Regard to the Creation of a Forest Reserve

Under date of August 13, 1903, two petitions for the creation of this forest reserve, numerously signed by residents and owners of land in the vicinity, were forwarded to the Secretary of the Interior. Most of the signers are cattle owners who believe that creation of a reserve means absolute exclusion of sheep, and Mr. A. J. Harrell, of San Francisco, a large cattle owner, who has some 5000 cattle grazing within the proposed reserve, is said to have circulated the petitions.

The second petition states that A. J. Harrell owns 3660 acres "mostly within proposed forest reserve". He has also posted the following notice at Hansen's store in the town of Rock Creek:

"I own the E. 1/2, S. E. 1/4 and W. 1/2, N. E. 1/4 of Section 24. W. 1/2 of E. 1/2 of Section 13. S. E. 1/4 of S. E. 1/4 of Section 12. All in Township 14 S. Range 17 E. Boise Meridian. S. 1/2 of S. 1/2 of Section 7. S. W. 1/4 of S. W. 1/4 of Section 8 in Township 14 S. Range 18 E. Boise Meridian.

"These lands lie on Shoshone Creek. Any person cutting or removing timber from these lands will be prosecuted". (Signed) A. J. Harrell.

The lands thus described, comprising 560 acres, lie within the proposed reserve and are fairly well timbered. There is no other timber in the region except that within the proposed reserve. It is evident that his object in petitioning for this reserve is three-fold, viz:

1st. To have the Government reserve all timber except his own so he can have a monopoly of selling timber and firewood to the hundreds of new settlers who will move into this region as soon as the canal is completed.

2nd. Through Government prohibition of sheep-grazing, which he expects will follow, to gain better range for his cattle.

3rd. When he has cut and sold his timber to exercise the right of lieu selection and take up timberland elsewhere.

At least 75 per cent of the ranchers who signed these petitions own cattle and also believe that the Government will exclude sheep and so give them undisputed use of the range. The cattle owners were the first settlers in this region and claim

that sheep have utterly ruined their grazing land and that the Government should recognize and protect their prior rights.

Conclusions and Recommendations

Upon investigation it was found that the land in question is unsuited for the purpose of a forest reserve; that the petitions were circulated largely in the interest of one man, Mr. A. J. Harrell, to further his own purposes; and that the question is one of grazing, cattle versus sheep, not properly to be settled by the means sought. It is strongly recommended, therefore, that the proposed Cassia Forest Reserve should not be created, but that, if possible, some action should be taken to restrict grazing on these lands and that the illegal cutting of timber thereon be stopped.